

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A wireless access point comprising:
a memory to store information relating to services available in an associated network;
a wireless transceiver to provide wireless communication with one or more wireless client devices; and
a controller to generate a services signal using service related information from said memory and to cause said wireless transceiver to transmit said services signal;
wherein said services signal is transmitted as part of a beacon signal transmitted by said wireless transceiver.
2. (Original) The wireless access point of claim 1, wherein:
said controller includes a service abstraction unit to parse service information received from a service discovery server and store said service information in said memory.
3. (Canceled)
4. (Original) The wireless access point of claim 1, wherein:
said wireless access point is programmed for use within a wireless network that utilizes medium access control (MAC) frames, wherein said services signal is transmitted as part of a frame body of a MAC frame.
5. (Currently Amended) The wireless access point of claim 4, wherein:
said services signal ~~includes~~ is transmitted in one or more information elements within said frame body of said MAC frame, wherein said wireless access point is for use within a network following the IEEE 802.11 wireless standard and said one or more information elements includes one or more of the reserved information elements having ID numbers 32-255 within a frame body of an IEEE 802.11 management frame.

6. (Currently Amended) The wireless access point of claim 5, wherein:
said frame body of said MAC frame also includes ~~information relating to a service advertisement frequency~~ an advertising interval that is being used to advertise a particular service.
7. (Original) The wireless access point of claim 1, wherein:
said services signal describes services using an extensible markup language (XML).
8. (Original) The wireless access point of claim 1, wherein:
said services signal describes services using a format that is readable within a data link layer of the associated network.
9. (Original) The wireless access point of claim 1, wherein:
said controller is programmed to generate said services signal in response to a request received from a wireless client device.
10. (Currently Amended) The wireless access point of claim 1, wherein:
said controller is programmed to broadcast services signals at ~~fixed~~ predetermined intervals.
11. (Currently Amended) A wireless access point, comprising:
a memory; and
a controller to receive information about services available within an associated network from at least one service discovery server and to store the information ~~in a predetermined format~~ within the memory, wherein said controller includes a service abstraction unit to parse service information received from said at least one service discovery server and store said service information in said memory in a predetermined format, said service abstraction unit having interfaces to accept service discovery plug-ins.
12. (Original) The wireless access point of claim 11, wherein:

said controller is programmed to generate a services signal, using information from said memory, to be transmitted to one or more wireless client devices within the associated network.

13. (Original) The wireless access point of claim 12, wherein:
said services signal describes services available within the associated network in a format that is readable within a data link layer of the associated network.

14. (Original) The wireless access point of claim 12, wherein:
said services signal describes services using an extensible markup language (XML).

15. (Original) The wireless access point of claim 12, comprising:
a wireless transceiver to wirelessly transmit said services signal.

16. (Original) The wireless access point of claim 12, wherein:
said services signal is transmitted as part of a medium access control (MAC) frame.

17.-26. (Canceled)

27. (Currently Amended) A method comprising:
receiving information relating to services available within a network from one or more service discovery servers;
storing the information within a memory in a wireless access point; ~~and~~
generating a services signal to be wirelessly transmitted in the network, using information stored in the memory; and
transmitting said services signal within an information field of a frame body of an IEEE 802.11 MAC frame to wireless client devices within a coverage area of the wireless access point, wherein said services signal is included within one or more of the reserved information elements having ID numbers 32-255 of said IEEE 802.11 MAC frame.

28.-29. (Canceled)

30. (Currently Amended) The method of claim 27[[8]], wherein:

~~said IEEE 802.11 MAC frame is a beacon frame transmitting said services signal includes transmitting said services signal as part of a wireless beacon signal.~~

31.-33. (Canceled)

34. (Original) The method of claim 27, wherein:

said services signal describes services using an extensible markup language (XML).

35. (Original) The method of claim 27, wherein:

said services signal describes services available within the associated network in a format that can be read within a data link layer of the network.

36. (Currently Amended) A system comprising:

a wireless access point including:

a memory to store information relating to services available in an associated network;

a wireless transceiver to provide wireless communication with one or more wireless client devices; and

a controller to generate a services signal using information from said memory and to cause said wireless transceiver to transmit said services signal, wherein said controller includes a service abstraction unit to parse service information received from service discovery servers and store said service information in said memory in a predetermined format, said service abstraction unit having plug-in interfaces to accept service discovery plug-ins; and

a portable computer to receive the services signal from said wireless transceiver and to display network service information to a user of the portable computer based thereon.

37. (Canceled)

38. (Currently Amended) The system of claim 36, wherein:

said wireless access point is for use within a network following the IEEE 802.11 wireless standard; and

said wireless transceiver transmits said services signal as part of a medium access control (MAC) frame in one or more of the reserved information elements having ID numbers 32-255 within a frame body of an IEEE 802.11 management frame.